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ABSTRACT

This paper focuses on children helping children through peer and cross-age tutoring with special emphasis for programs serving the student remedial or special education setting. The historical roots of peer and cross-age tutoring are discussed. Explanations of the nature of the tutorial experience are presented, along with a discussion of the rationale for tutorial programs. Several practical considerations for classroom teachers working with peer-learning projects are considered. Specific suggestions are offered regarding the selection of tutors and tutees, the development of materials, and the use of tutoring for atypical learners. Peer and cross-age tutoring programs involving atypical students appear to benefit both the tutor and the tutee. (PCB)

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Historical Roots, Rationales and Applications of Peer and Cross-Age Tutoring: A Basic Primer for Practitioners and Researchers

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Running head: HISTORICAL ROOTS, RATIONALES AND APPLICATIONS

Abstract

Throughout the history of American education, numerous innovations have been heralded as miracle cures for the various malaises plaguing the field. All too often, calls for improvement have lead to faddish panaceas that provide little in the way of constructive change. Yet, one time-tested process which routinely demonstrates successful results for all parties involved has been peer-tutoring or cross-age tutoring. The proof for such a process is based on sound theory and a sizable body of research. Hence, it is the purpose of this article to touch upon the historical roots of peer tutoring, to discuss the rationale for such programs, and to provide basic applications of the information. As such the article acts as a basic source for practitioners and researchers wishing to develop a basic knowledge of the process.

Historical Roots, Rationales and Applications of Peer and Cross-Age Tutoring: A Basic Primer for Practitioners and Researchers

While education as a field has been party to various miracle cures over the past 30 years, peer tutoring is one educational program regularly producing positive academic and affective growth on the part of all parties involved in the process (Cohen & Kulik, 1981; Devin-Sheehan, Feldman & Allen, 1976; Ellson, 1976; Fitz-Gibbon, 1977; Hartley, 1977; Rosenshine & Furst, 1969). In addition, the program is as cost effective as any curricular model in the schools today. This paper will focus on children helping children through peer and cross-age tutoring with special emphasis for programs serving the students in remedial or special education settings. It begins with a brief historical validation of peer tutoring, then provides pragmatic working definitions of the tutoring while differentiating between the constructs of peer tutoring and cross-age tutoring. Finally, the paper reviews several practical considerations for classroom teachers working with peer-learning projects. An extended reference list at the end of the article is keyed to specific topics to facilitate retrieval of categorical information by practitioners and researchers alike.

Historical Background

Throughout recorded history there have been numerous references to tutoring. During some periods in history, tutoring was the main means of imparting knowledge to the next generation. The elite and wealthy have consistently employed private adult

tutors; yet, a more common practice has been the use of older children to help younger children to learn. In England at the end of the 18th century, Joseph Lancaster developed a popular and inexpensive form of mass education for the poor. Acting as the "master teacher," he trained a group of students to serve as his assistant teachers. Lancaster taught lessons to these assistant teachers and they, in turn, each taught the same lesson to about 20 students under his supervision. This system, which became very popular, was introduced by Lancaster in the United States in 1818, and it was widely used in this country for about 30 years. While Lancaster's system was cost-effective, it aroused parents' suspicions about the "second-class education" their children were receiving, and it eventually fell into disfavor.

At about the same time, the little red schoolhouse, common to farming communities and small towns alike, spread across the nation. Since the rural children differed in age and educational level, teachers recognized that they could not shoulder the entire teaching burden alone. As a result, teachers designated older students as tutors to help the younger children. By the mid-1800's, a Boston educator named William Fowle wrote a Manual of Mutual Instruction which detailed, along with specific tutorial procedures and instructional materials, a unique reward system of monetary incentives for pupils to be used in both small and large schools.

Early versions of tutoring were gradually abandoned over the intervening years as teachers strove for professionalism through specialized training at state teachers colleges and universities.

Also, the disappearance of one-room schools and the growth of larger schools with graded or departmentalized patterns of organization provided for more homogeneous groupings in the classrooms.

From 1900 to 1960 there was little mention of tutoring in the public schools and little or no related research. The early 1960's, however, witnessed a revival of peer and cross-age tutoring across the country (Wagner, 1982). This rebirth was based, in part, on the fact that many school systems and teachers were faced with learning situations that were very different from those they had encountered just a few years earlier. The great mobility of the postwar population changed the breadth of the students' achievement levels in many classrooms. Moreover, with the tendency for heterogeneous student populations came a great need for new instructional methods, teaching techniques, class materials, and support services. Peer tutoring represented a promising instructional reaction to these trends.

The launching of the Sputnik satellite by the Soviet Union in 1957 also indirectly contributed to the resurgence of interest in peer tutoring. This landmark achievement inspired a sense of nationalistic urgency stressing both the importance of education in a modern technological society and the need to provide all children with a quality education. Then, shortly thereafter the coming of the "War on Poverty," led to an increased awareness of decreasing educational performance of urban children and a general alarm about the depressed quality of education in inner-city schools. And with this concern came a new degree of

involvement. Volunteer tutoring by individual members of the community was followed by the growth of formal paraprofessional programs, staffed school volunteer projects, and both school and community-based tutorial services, all of which were funded by a variety of public sector and foundation sources. As a further outgrowth of the movement came a rekindling of the concept of children teaching children--peer tutoring.

Cross-Age And Peer Tutoring

Tutoring is defined here as the process by which one pupil, with a minimum of specialized training and under the overall guidance of a teacher or instructional aide, helps one or more students learn a specific skill. Such tutoring provides individualized assistance that supplements both regular and special classroom instruction. The tutoring process is not a formalized teaching strategy, but rather a temporary means to help prevent educational problems or remediate existing ones.

Generally, tutees are students who require assistance with some academic facet of the classroom learning situation. A student of nearly any age who has mastered a skill can potentially serve as a tutor for that skill. Even so, it is important to differentiate between two types of tutoring practices. In cross-age tutoring programs, a tutor from an upper grade helps a younger student (or students) from a lower grade. Cross-age tutoring can serve either as a developmental or a remedial educational experience for the tutor or the tutee. As an example of cross-age tutoring, a sixth grader with third-grade reading skills might be selected to tutor a third grader in

reading. To do so, the sixth grader must "bone up" on his/her reading skills, and the third grader receives additional instruction that serves as a reinforcement and ongoing review for recent developmental or remedial lessons. Both tutor and tutee usually derive added motivation and incentive to succeed in school as a result of being paired together. While the goal of cross-age tutoring must be to help the tutees profit from the instructional process, it is generally felt that the tutors may benefit as much as the tutees. Recently, Nevi's (1983) review of the literature proposed that the theoretical support for such a belief ranges from tutor-centered theories (role, esteem, and locus of control), to process-centered theories (reinforcement, utility, insight into subject/self and teaching/learning process) and to situation-centered theories (time on task, relearning, and materials employed). No doubt research will ultimately demonstrate that the benefits are based on an intricate weave of situation specific variables that might one day be manipulated to provide maximum growth for both tutor and tutee.

The second type of tutoring program, peer tutoring, utilizes tutors who are the same age or grade level as their tutees. Peer tutoring provides for strengthening some of the social and emotional needs of individual children who may not be generally accepted by their peers. The peer tutor serves as a role model for the tutee so that the tutee may learn appropriate social behaviors as well as academic skills. Most tutors and tutees can profit from relating to peers in a cooperative and helpful relationship rather than on a competitive basis. The peer

tutoring process often works to "bring out" unusually quiet or withdrawn students. These children are frequently helped by relating to a single person who is interested in him or her as a partner in the learning process.

The Tutorial Experience

The individualized peer or cross-age tutoring situation can, and should, be a very private and intensely interactive experience between individuals. As such, the tutee receives the undivided attention of another student , and thus, the tutorial relationship encourages tutors and tutees to interact actively and openly during the instructional period. Tutors can then correct questionable responses directly and reinforce appropriate ones. A great strength of this tutoring situation, then, is the rich opportunity for the learner to participate actively in a learning process with immediately observable results. Since the tutoring situation is such a private one, it tends to lower the performance anxiety often associated with large group instruction. Hence the tutoring situation is less likely to be as threatening as either small group or large group instruction.

Both critical analyses and meta-analyses confirm popular reports that tutoring as an individualized learning experience benefits the tutor as well as the tutee (Cohen, Kulik & Kulik, 1982; Devin-Sheehan, Feldman & Allen, 1976; Ellson, 1976). In addition to attitudinal advantages, the tutor generally profits academically. In one specific example, this fact was confirmed by Rosner's (1970) report on a cross-grade tutorial program. At the conclusion of a ten-week tutorial cycle, peer tutors gained

an average of one year and five months growth on the California Test of Basic Skills and one year on the Gates-McGinitie Reading Test. The author states that these results are similar to those obtained during ten-week tutoring cycles throughout the six-year period the tutorial program was in effect up to that time.

Such findings are further supported by Paoni (1971). In this experiment, 60 sixth graders tutored a like number of third graders during three 1/2 hour sessions per week over four months. The other half of the subjects served as controls. The results of the study indicate that the tutorial program was significantly more effective for both the students acting as tutors and those being tutored than for the controls receiving a traditional program in improving reading skills.

Selecting Tutors and Tutees

Effective peer and cross-age tutors must be carefully screened. Tutors need to be responsible, patient, and interested in tutoring, but they do not have to be the best students. In fact, their knowledge and experience with the subject matter is secondary to their ability to interact with the tutees. They must be provided with at least minimal training to insure that they carry on the process with reasonable effectiveness. In addition, tutors must be supervised and supported in order to insure that the basic conditions for the tutoring process are met over time. Of equal importance to instructional success are the attributes of the tutee.

Students who are assigned to a tutorial program (or who volunteer for extra help) often believe that they cannot learn

like other children in their class. They tend to be discouraged about their own capabilities as students. It seems that one of their greatest needs is for some evidence of their own successful learning and, consequently, for a renewed sense of their own adequacy. The ultimate goal of the tutoring program is for the tutees to develop positive attitudes toward the subject matter which, in turn, will promote their desiring to participate more fully in learning situations in the classroom. A single experience in successsful learning through the tutoring situation, however, is not enough to change the tutees' views of themselves as poor students. Rather, they need consistent successes if they are going to catch up in their skills and if the tutoring process is to enable them to learn adequately in the classroom. It is vital to remember, though, that if tutoring must be continued over an extended period of time, the basic instructional program is probably inappropriate for the child and alternatives should be explored. Finally, the test of the effectiveness of the tutoring program may well be that the tutee can assume responsibility as a tutor for helping another student in that skill.

Implications for the Atypical Learners

Atypical students, enrolled in regular classes, special day classes, and pullout sections, benefit from peer tutorial programs. It is often useful for students enrolled in remedial sections or special education classes to participate as tutees in a program in which regular education students serve as their peer tutors (Catterall & Gazda, 1978). Over the years, special

education students are likely to have been embarrassed a number of times in the classroom by asking inappropriate questions or by giving incorrect answers when called upon. They may feel rejected by their teachers and ridiculed by other students. Yet once tutor-tutee trust is developed, the relative privacy of the peer tutoring situation makes it possible for them to ask questions or make mistakes without being ashamed of themselves.

Remedial learners or special education students are also likely to have less self-esteem and inappropriate or immature social and emotional behaviors. Peer tutors can be effective role models for these students, modeling good peer relations and appropriate social skills. When a special education student is seen by other students as having a friendly relationship with a non-special education peer, greater peer acceptance can result. This fact, coupled with some academic success experiences, may provide increased self-esteem and self-acceptance for atypical students.

It is important to remember that the special education student should participate whenever possible in selecting the peer tutor. If there is an unsatisfactory match between tutor and tutee, then the effectiveness of this approach will be limited. By contrast, if the child admires or can identify with the peer tutor, then prospects for a successful tutoring experience are enhanced. In dealing with students who have social and emotional difficulties, Wiederholt (1978) recommends that the peer tutor be utilized as a peer advocate. As a peer advocate, the student helps the tutee with any problem he or she

may face throughout the school day. The peer advocate helps the student develop positive school behaviors, reinforces the student's positive actions, and assures that the student is involved in social activities within the "mainstream" of the school.

In special education programs, cross-age tutoring may be used as an intricate part of the behavior management system. Cross-age tutoring can be utilized as an incentive or a reward. Special education students can work toward an opportunity where they may leave the classroom for a short while to help other students in lower grades. For these students maintenance of the cross-age tutor position is contingent upon positive behavior in the school environment. Knowledge of this fact provides added motivation for the students who serve as cross-age tutors. In addition to the obvious academic benefits for the cross-age tutor, tutoring also encourages the tutor to understand the role of the teacher as a lifelong learner. In a very practical sense, one can never fully understand the learning process until one has tried to teach something to another individual.

Special education students acting as cross-age tutors recognize that they must make the subject matter and skills interesting to the tutee. In "selling" the information to their tutees, the tutors also make the material their own (i.e. master it) by a form of overlearning. In fact, research shows that successful tutors develop an increased interest in the subject in which they are tutoring (Paoni, 1971; Ellson, 1969).

Developing Materials for Peer Tutoring

The critical analyses of tutoring research (Ellson, 1976; Rosenshine & Furst, 1969) suggests that programs which are well-structured are more apt to be successful in promoting cognitive growth. Therefore, the materials used in a tutorial project involving atypical students must be systematically organized into small, sequential elements which promote verbal communication between the tutor and the tutee. When content develops in a step-by-step progression, success is more certain because each step is mastered before progressing. The expectation of success is, in itself, a positive reinforcer for both tutor and tutee. Structured programs also make possible the division of material into sections or modules to provide more realistically attainable short-term goals. Another advantage of a structured program is that it provides for maintaining continuity and monitoring of tutoring, even when there is a change in tutors.

There seems to be much emphasis placed on the tutees' progress. Daily progress reports and checklists are available for this purpose, but little or no attention has been given to the growth/progress of the tutor. An effective tool to communicate the progress of peer or cross-age tutors among teachers and between parents and teachers is a simple tutor's progress report. When special education students serve as cross-age tutors in other classrooms, the supervising teacher simply puts two progress reports for each tutor in the regular teacher's mailbox at the close of each report period. The teacher completes the reports and returns them to the supervising

teacher, who in turn places one copy in the students' file and then sends the other copy home with the report card. Thus, both the tutor's teacher and parents can see what is happening in the tutoring program. A careful perusal of several progress reports from the student's folder provides good documentation of the tutor's progress over time. By the same token, a quarterly tutor's progress report should be completed and returned to teachers of any peer tutors who may be coming into the special education class from the regular program.

In conclusion, peer and cross-age tutoring programs involving atypical students appear to benefit both the tutor and the tutee. The tutee should succeed in learning and the tutor should profit in helping the tutee learn; after all, "He who teaches others teaches himself."

References

References found in this article are listed along with a number of other sources pertinent to the concept of peer tutoring. While this list in no way presents all of the articles, technical reports or books on the subject, it does provide the reader with a primary set of references which if perused will highlight a vast majority of the literature sources available to date. Following each of the bibliographic entries, the reader will observe a letter which denotes the primary content of the source. The sources are keyed in the following manner:

1. (CA) - Indepth critical analyses or meta-analyses,
2. (H) - Historical perspectives and theory,
3. (P) - Program development, maintenance and materials, and
4. (R) - Individual reports of research.

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Figure 1.

TUTOR'S PROGRESS FORM

Tutor's Name _____ Date _____

Teacher(s) _____

School _____

Tutoring Times _____

Behavior	almost always	frequently	occasionally
Comes to class on time			
Follows directions			
Shows self-control			
Motivates student(s)			
Is a good model			
Is independent/creative			

Comments: _____